

asymmetrical and abnormal positions of the genital pores in *Allurus*, sp.

For the present I content myself with merely noting without comment these interesting abnormalities.

#### EXPLANATION OF PLATE III.

##### *Astacus fluviatilis.*

*Fig. 1.* View of ventral surface of abnormal specimen of female crayfish, sufficient to show the position of the second genital aperture (*o.p.* 2) on each side, *o.p.* 1 being the normal oviducal pore; X., XI., XII., XIII., indicate the last four ambulatory limbs, which are represented as cut short; *Ab.* 1 the first abdominal sternum with normal female appendages.

*Fig. 2.* Side view of the same crayfish partially dissected; the hinder part of the carapace (*ca*) has been removed, the epimeron (*ep*) and gills have been cut away; the bases of the ambulatory appendages (10, 11, 12, 13) are represented; *o* is the normal ovary, *o.d.* 1 the normal oviduct, *o.d.* 2 the accessory oviduct passing into appendage 13; *Li.*, liver, underlying ovary; *Ab.* 1, *Ab.* 2, the first and second abdominal segments.

##### *Lumbricus herculeus.*

*Fig. 3.* Ventral view of segments XII. to XVI., showing on the animal's left side the normal oviducal pore (♀) and spermiducal pore (♂), and on the right side the abnormal position of these apertures.

*Fig. 4.* Dissection of segments IX. to XIII., to show the asymmetrical condition of internal structures. The normal condition obtains on the left side, the abnormal on the right; *spth.*<sup>1</sup>, *spth.*<sup>2</sup>, the spermathecae; *ov.*, abnormally placed ovary; *cal.*, calciferous gland; *æs.*, œsophagus. None of the structures have been cut or removed, the calciferous gland and sperm-sac of segment XII. being absent.

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XXVII.—*Natural History Notes from H.M. Indian Marine Survey Steamer 'Investigator,' Commander R. F. Hoskyn, R.N., commanding.*—No. 21. *Note on the Results of the last Season's Deep-sea Dredging.* By J. WOOD-MASON, Superintendent of the Indian Museum, and Professor of Comparative Anatomy in the Medical College of Bengal, and A. ALCOCK, M.B., Surgeon I. M. S., Surgeon-Naturalist to the Survey.

[Concluded from p. 202.]

Family **Inachidæ.**

PLATYMAIA, Miers.

35. *Platymaia Wyville-Thomsoni*, Miers.

*Platymaia Wyville-Thomsoni*, Miers, 'Challenger' Brachyura, 1886, p. 13, pl. ii. fig. 1.

Three specimens (one male and two ovigerous females), from Station 56, 240 to 220 fathoms.

The male measures:—

	millim.
Length of carapace .....	93
Greatest breadth of carapace .....	97
Expanse of legs .....	700

The largest female measures :—

	millim.
Length of carapace .....	80
Greatest breadth of carapace .....	82
Expanse of legs .....	400

All our specimens, including those taken on previous occasions, greatly exceed the 'Challenger' specimens in size. The males run much larger than the females, and the great chelæ are greatly enlarged, with the palms inflated and armed with three rows of slender hooked spines.

Our specimens differ from the type in a number of details, which do not justify the description of a new species without actual comparison with the type.

#### ECHINOPLAX, Miers.

##### 36. *Echinoplax pungens*, sp. n., Wood-Mason.

Differs from *Echinoplax Moseleyi*, Miers, in its much larger size; in its much more numerous, more thickset, and longer spines; in its more regularly and symmetrically pyriform carapace; in its thicker legs; in its smaller eyes, which, when laid back, do not nearly reach to the spine which limits the ocular cavity posteriorly; and by the broader abdomen of the female.

Colour in the fresh state a brilliant straw-colour.

Five female specimens from Station 56, 240 to 220 fathoms, the largest of them measuring 340 millim. in expanse of legs, 60 millim. in breadth of carapace across the branchial regions, and 88 millim. in length of carapace from its hinder margin to the tips of the rostral spines.

Smaller specimens have a much more spiny abdomen and are generally more spiny than larger ones.

##### 37. *Encephaloides Armstrongi*, gen. et sp. n., Wood-Mason.

Remarkable for the large size of the branchial chambers, which are so inflated as to meet together over the back in a straight suture. Both the afferent and the efferent branchial openings are also very large.

In the female the cavity of the brood-pouch communicates with the branchial chambers by two canals, formed by deep

notches in the posterior angles of the thorax and by the base of the abdomen, whereby in all probability a current of fresh water is caused to flow over the eggs. The rostrum is triangular and shaped like the beak of a bird, and the antennary flagella are visible from above beyond its margins. The eyes, which are very small, are retractile against the sides of the carapace, and the narrow orbital eave is provided with a minute spine anteriorly and posteriorly. The legs are long and slender, with their segments, including even the tapering dactylopodites, cylindrical.

Numerous specimens were obtained at Stations 81 and 96, and at Station 76 over two hundred were taken, almost all of them being males. This form, in fact, is characteristic of the infra-littoral of the Bay of Bengal, near the 100-fathom limit, from the coast of Arrakan to the Godávári.

Colours in the fresh state:—Carapace pinkish yellow, ambulatory legs pink.

#### Measurements.

	Male.	Female.
	millim.	millim.
Length of carapace .....	41·5	28
Breadth of carapace .....	42	27
Height of branchial regions .....	20·5	12
Expanse of first pair of ambulatory legs.	335	134
Length of chelipeds .....	74	33

#### ANAMATHIA, S. I. Smith.

##### 38. *Anamathia Livermorii*, sp. n., Wood-Mason.

Closely allied to *Anamathia pulchra*, Miers, differing in having the carpopodite and propodite of the chelipeds rounded instead of carinate.

The spines of the rostrum are as long as the distance in a straight line from the hinder margin of the carapace to the gastric spine. The carapace bears twenty spines disposed in five longitudinal rows, namely two lateral of three spines each, one dorsal of four, and two subdorsal of five each including the postoculars.

A male and two females from Station 56, 240 to 220 fathoms.

Length of the largest specimen 22 millim.

#### PUGETTIA, Dana.

##### 39. *Pugettia globulifera*, sp. n., Wood-Mason.

Allied to *Pugettia velutina*, Miers, with which it agrees in

the possession of two foliaceous tubercles on the inflected portion of the carapace on each side, and in the form of the orbits and postocular lobes; but from which it differs in the spines of the sides of the hepatic region being all but erect and expanded at the base into huge pear-shaped tubercles, which present themselves in an underview as two great smooth and polished white hemispherical bosses at the anterolateral angles of the buccal frame; also in its foliaceously-carinated chelipeds and in the club-shaped setæ with which its ambulatory legs are garnished.

Station 56, 240 to 220 fathoms.

Length 15·5 millim.

#### OXYPLEURODON, Miers.

##### 40. *Oxypleurodon cuneus*, sp. n., Wood-Mason.

Allied both to *Oxypleurodon Stimpsoni*, Miers, from 375 fathoms off the Philippines, and to *Sphenocarcinus corrosus*, A. M.-Edw., from 100 fathoms off Barbadoes; resembling the former in the form, number, and distribution of the carapacial prominences, and the latter in the form though not in the structure of the rostrum. In *Oxypleurodon Stimpsoni* the rostrum is formed by two horns which diverge widely from the level of the anterior end of the orbit, in *Sphenocarcinus corrosus* by two horns uniting together in the middle line to form an apically bifid wedge-shaped mass, and in the new species the carapace is produced into a long, slender, tapering rostrum, which is minutely bifid at the extremity. All the joints, except the dactylopodites, of all the legs are strongly crested dorsally.

Length of carapace, from tip of rostrum to posterior margin, 18·7 millim.; breadth between points of branchial eminences 13·7 millim.

Two males and one ovigerous female from Station 56, 240 to 220 fathoms.

#### DOCLEA, Leach.

##### 41. *Doclea ovis* (Herbst).

One young specimen from Station 96, 98 to 102 fathoms.

#### Family Cancridæ.

##### 42. *Nectopanope rhodobaphes*, gen. et sp. n., Wood-Mason.

Carapace about  $1\frac{1}{3}$  times as broad as long. Frontal

margin straight, entire—being only obsoletely bilobed—divided from the supra-orbital margin on each side by a slight notch for the reception of the first joint of the flagellum of the antennæ. Supra-orbital margin with one fissure, infra-orbital entire. Antero-lateral margins shorter than the postero-lateral, arched, armed with three teeth, including the extra-orbital angle. Branchial regions swollen, separated from the gastric by a V-shaped impression, from the cardiac by their own prominence, and by a slight transverse depression from the hepatic, which is separated from the gastric in a similar manner. Afferent and efferent branchial apertures large; the outer wall of the large efferent canal forms a subcarinated elevation of the anterior pleural region. Chelipeds large, smooth, with a strong groove near the lower margin of the produced portion of the propodite on the outside; the upper margin of the propodite subcarinate; the carpopodite smooth, subquadrate, with a small spine at the inner angle; and the meropodite with a short sharp spine near the apex of its posterior angle. Ambulatory legs rather weak, the first three pairs subequal, the last shorter, with the meropodite curved in correspondence with the convexity of the branchial regions of the carapace; the dactylopodites are compressed-styliform, with a groove on each side and a slight fringe of setæ on the upper and lower margins, those of the last pair being, like their propodites, shorter and broader and fringed, especially below, with longer setæ; the ambulatory legs in fact are subnatatory, and agree in structure with those of the Portunidæ. Integument everywhere polished and glabrous, except for the presence of a few scattered setæ on the dorsal surface of the legs and for the dactylopoditic fringes.

In life this crab was of a beautiful deep-sea pink, with a dotted, V-shaped, white mark between the gastric and branchial regions.

One specimen was obtained at Station 96, 98 to 102 fathoms; the length of its carapace is 21.4 millim., and the greatest breadth between the points of the third teeth 29 millim.

The following species is referred provisionally to the same genus, though it differs in having the first tooth of the antero-lateral margin distinct from the orbit, and the legs, especially the last pair, not nearly so distinctly natatory.

43. *Nectopanope longipes*, sp. n., Wood-Mason.

Differs from the preceding in its branchial regions not



being inflated; in the form of the teeth of the antero-lateral margins of the carapace, the first of which is a rectangular plate entirely separate from the extra-orbital angle, while the two remaining are sharp and conical; in its relatively longer legs, which are setose at their extremities, with the dactylo-podites of the last pair not much more expanded than those of the preceding pairs; in having the upper surface of the carapace dull and minutely granulose, and the fingers of the chelipeds black.

One male and one female, juv., from Station 56, 240 to 220 fathoms.

Length of carapace 8.5 millim., breadth 11.7 millim.

44. *Sphenomerus trapezioides*, gen. et sp. n., Wood-Mason.

Carapace about  $1\frac{1}{3}$  times as broad as long; its upper surface is smooth, polished, and tolerably convex in all directions, but especially antero-posteriorly; and it is devoid of all grooves except two faint crescentic ones, which separate the cardiac from the branchial regions. The deflexed and somewhat produced frontal margin is divided by a distinct notch into two truncate-rounded lobes, and is without granules or raised rim, as are also the entire upper and lower orbital margins. The antero-lateral margins, which are only about two thirds the length of the postero-lateral, form with the frontal margin a semicircular outline; each bears a minute spine at the extra-orbital angle, followed at equal distances by two smaller ones. There is also a small spine at the internal infra-orbital angle. The basal joint of the antennae is not much developed and the flagellum occupies the internal orbital hiatus. The external maxillipeds have the mero-podite slightly oblong, with the succeeding joint articulated to its truncated antero-internal angle. The abdomen of the male is six-jointed, the third and fourth segments being almost indistinguishably ankylosed together.

Chelipeds in both sexes extending far beyond the carapace, massive, and of unequal size, the right being much larger than the left; the fingers are broadly banded with black across their middle, the palms are smooth, the wrist is rounded and smooth, with a minute spine on its inner side; the mero-podite is wedge-shaped at its proximal end and bears six to eight small spines on its thickened distal end, as in *Trapezia*. Ambulatory legs weak and narrow, with the two terminal joints articulated together and constructed as in *Trapezia*.

From Station 56, 240 to 220 fathoms.

Length of carapace 8.5 millim.; breadth between last pair of antero-lateral tubercles 11 millim.

This species was taken near the same place in a previous season.

Family **Leucosiidæ**.

45. *Parilia Alcocki*, gen. et sp. n., Wood-Mason.

This crab is remarkable not only for the great size to which it attains—equalling though not exceeding the *Myropsis goliath* of A. Milne-Edwards—but also for the great development of the respiratory mechanism. The finely and sharply granulated carapace is distinctly broader than long. When viewed from above it appears hexagonal in outline, the interval between the outer canthi of the afferent branchial apertures forming the wide and straight anterior side; the intervals between the outer canthus of the afferent branchial apertures and the last antero-lateral tooth of each side, the nearly straight antero-lateral sides; the intervals between the last antero-lateral tooth and the posterior branchial spine of each side, the very strongly arched postero-lateral sides; and the interval between the posterior branchial spines of opposite sides, the posterior side of the hexagon. It is depressed in front and strongly swollen behind, both vertically and horizontally, but especially horizontally, so as in a side view to appear wedge-shaped. The regions are well-marked, the much inflated branchials being sharply marked off from the elongated *fleur-de-lys*-shaped gastro-cardiac and from the hepatics by a deep groove, which, commencing behind the cardiac protuberance, passes forwards and inwards, and then curves boldly forwards and outwards to the first antero-lateral tooth on each side, and is deeply indented at intervals in its course. The hinder margin bears three short conical spines, of which the middle is small and tends to degenerate with age into a mere clump of granules. Above the marginal spines, on the vertical hinder surface, is a transverse row of three similar spines, of which two are on the branchial regions and the third and smallest arises from the middle of the cardiac boss, whence a carina passes forwards along the mid-dorsal line nearly to the frontal margin. The antero-lateral margin bears four spiniform tubercles, one in the middle of the length of the pterygostomial ridge (which, in the absence of an hepatic ridge, functions as a portion of the antero-lateral margin), and three separated from each other by equal intervals and from the pterygostomial by an interval equal to the sum of their own interspaces.

The two antennular lobes of the front, which is much as

in *Myra* and *Ilia*, are dorsally carinate. The supra-orbital margin is marked by two fissures; the infra-orbital is a stoutish triangular tooth, separated externally from the supra-orbital by an angular notch, internally by a wide hiatus from the front, and inferiorly from the notched upper edge of the afferent branchial opening by a considerable space. The structure of the orbit is in fact to all intents and purposes identical with that of *Ilia*, the only difference being that the extra-orbital notch forms a third fissure in the latter, whereas in *Myra* the notched edge of the afferent branchial opening forms, or comes into such close relation with the orbit that it seems to form, the lower margin of the latter, and that which answers to the lower orbital rim of *Parilia* is an extra-orbital lobe separated from the supra-orbital margin by a third and from the functional infra orbital margin by a fourth fissure.

The little lobe which in *Myra* bounds the outer notch of the upper margin of the afferent branchial aperture and does not extend beyond the level of the extra-orbital lobe, is in *Parilia* laterally expanded to a huge extent on each side, so as to form the enormously wide orifices of the afferent branchial channels, and thus to treble the apparent width of the front. The exognaths of the external maxillipeds are commensurately and concomitantly widened, and are segments of a circle larger than a semicircle, thus exceeding in width the same parts even in *Philyra*; they are truncate at the extremity, and when closed leave a wide chink-like opening between themselves and the sides of the carapace.

The chelipeds are long, slender, and cylindrical, being about twice as long as the carapace in adult females and males of the same size, but no less than  $4\frac{1}{2}$  times as long as the carapace in giant specimens of the latter sex; they are finely and sharply granulated, especially on the upper surface, from the base to the insertion of the dactylopodite, whence they are smooth; the meropodites are about equal to the carpopodite with propodite up to the insertion of the dactylopodite, which is scarcely more than half the length of the propodite without its prolongation in females and in males of the same moderate size; the propodite increases slightly in vertical width to the insertion of the dactylopodite. The legs are of moderate length and strength and are almost smooth; their meropodite is almost equal to the propodite and dactylopodite together; the dactylopodites, which are strongly fringed on the upper and lower edges, are so twisted and curved that their smooth and transversely convex sides are directed forwards and upwards, and backwards and downwards



respectively, while their dorsal and ventral edges have become upper and lower.

The abdomen of the male is only five-jointed, the third, fourth, and fifth joints being ankylosed together. That of the female has the full number of distinct joints; the abdomen and sternum securely interlock, the sterna of the latter giving off a forwardly-increasing series of laminar processes which project downwards and inwards over the edges of the former; there is an erect spine on the sternum between the genital apertures, and the spacious brood-cavity communicates with the branchial cavity by a hole near each posterior angle of the thorax.

The eggs are very small, and in the specimen examined few.

Colours in life:—Carapace deep pink, fading gradually to pale straw-colour at the posterior margin; legs pink, with the articulations, like the chelæ, white.

Twenty-eight males at Station 96, 98 to 102 fathoms; previously obtained (ten females) off the Godáviri Delta in 70 fathoms and (three males and one female) off the Mahánadi Delta in 68 fathoms.

	Female. millim.	Male. millim.
Length of carapace . . . . .	32	53
Breadth of carapace between last pair of antero-lateral tubercles . . . . .	37	63·5
Length of exognaths of external maxillipeds . . . . .	9	15·5
Breadth of exognaths of external maxillipeds . . . . .	6	10
Length of chelipeds . . . . .	67	250
Length of meropodites of chelipeds . . . . .	26·5	115
Length of propodites to insertion of dactylopodites . . . . .	20·5	95
Length of dactylopodites . . . . .	11	26·5

#### RANDALLIA, Stimpson.

##### 46. *Randallia pustulosa*, sp. n., Wood-Mason.

Carapace above covered tolerably thickly with unequally large, rounded, submammillated, granulose tubercles, with much smaller ones interspersed. Of the largest tubercles one is on the hinder end of the prominent pterygostomial ridge, three are on the lateral margin, and two on the postero-lateral margin on each side. The regions are very distinctly marked out by grooves, the cardiac being especially deeply circumscribed, and the hepatic being separated from the gastric by a

fine groove which runs from the cervical without interruption to the outer of the two supra-orbital fissures. A huge recurved spine arises from the middle of the cardiac boss in addition to the two blunt triangular spines at the hinder margin of the carapace. The chelipeds are cylindrical and finely and sharply granulated; the meropodite is but little longer than the carpopodite with the palmar part of the propodite, which last is a little inflated in its basal half and about as long as the dactylopodite. The legs are not very strongly granulated: their dactylopodites have the same structure as in *Parilia Alcocki*. The abdomen, which interlocks with the thorax much in the same perfect way as in the last-named species, is five-jointed, the fourth, fifth, and sixth segments being ankylosed together; the seventh is acuminate triangular. The brood-cavity communicates by holes with the branchial cavity. The afferent branchial apertures are large and prominent; their carapacial border is divided by a fissure into two lobes, an outer with rounded and an inner with sinuous margin.

One female specimen from Station 56, 240 to 220 fathoms.

Length of carapace 32 millim.; breadth of carapace between last pair of lateral tubercles 33 millim.; length of chelipeds 65 millim., of their meropodite 26.5 millim., of palm of propodites 15 millim., of their dactylopodites 15 millim.

#### Family Raninidæ.

##### LYREIDUS, De Haan.

##### 47. *Lyreidus gracilis*, Wood-Mason.

*Lyreidus gracilis*, Wood-Mason, Journ. Asiat. Soc. Beng. 1888, vol. lvi. pt. ii. p. 376.

From Station 56, 240 to 220 fathoms.

#### Family Homolidæ.

##### [HOMOLA, Leach.

1. *Homola barbata* (Herbst).

?2. *Homola vigil*, A. M.-Edw.

##### PAROMOLA, gen. nov., Wood-Mason.

The basal joint of the eye-peduncle is elongated and the eye reaches the commencing orbit through a gap in the anterior

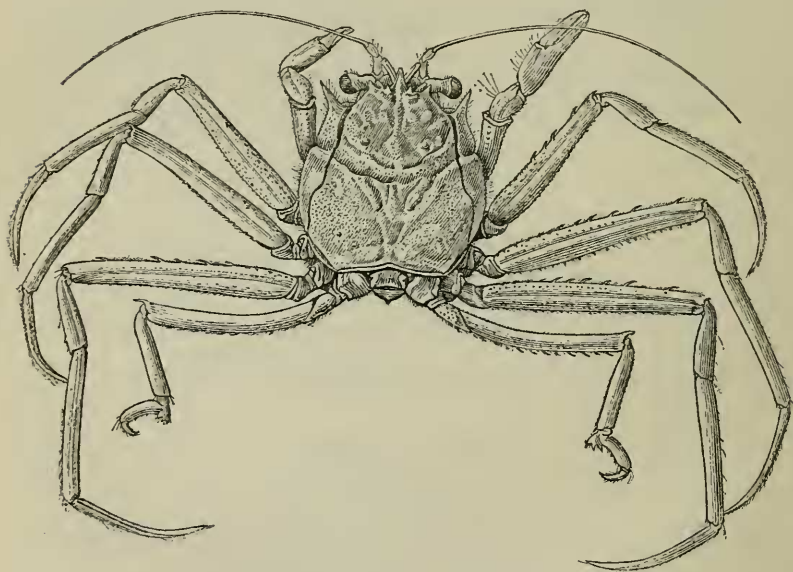
margin of the carapace between the rostral and supra-orbital spines. The orbit is a wide and shallow cavity, the bottom of which is still some distance behind the anterior margin, and it is defined externally by two spines. The very distinct and throughout dorsal *linea anomurica* runs to the base of the supra-orbital spine. The carapace is decidedly macrurous in form, thick, with the imperfectly-formed lateral margins twice interrupted by regional grooves. The last two joints of the fifth pair of legs form a perfect subchela, the dactylo-podite coming into complete relation with the basal toothed process of the propodite.

For *Homola Cuvieri* (Risso).

48. *Paromolopsis Boasi*, gen. et sp. n., Wood-Mason.

The basal joint of the eye-peduncle is elongated, and the eye reaches the orbit through a gap in the anterior margin of

Fig. 5.



*Paromolopsis Boasi*. From a photograph, natural size.

the carapace between the supra-orbital and antennal spines. The sides of the head are more produced, and the consequently more developed orbits are bounded externally by one very

large spine, the extra-orbital angle, which all but reaches the level of the rostrum.

The carapace, of an elegant urn-shaped outline, is depressed, with distinct carinated lateral margins, which are only once interrupted; it is, in fact, more brachyurous; the areolation, however, differs in no essential particular from that of other forms.

The *linea anomurica* is very distinct, dorsal in position, and runs to the interval between the supra-orbital and antennal spines. The last two joints of the fifth pair of legs form an imperfect subchela, the short dactylopodite not nearly reaching the nevertheless well-developed toothed process of the base of the propodite; their meropodites reach the end of the extra-orbital angle when laid forwards.

Colour in life red.

One specimen from off North Sentinel Island (Andamans), 480 fathoms.]

49. *Hypsophrys superciliosa*, gen. et sp. n., Wood-Mason.

The basal segment of the eye-peduncle not being elongated the eyes do not extend beyond the edges of the decurved lateral parts of the anterior margin of the carapace, and there are hence no orbits. The surface included between the anterior margin of the carapace above and at the sides on the one hand, and the antennary sternum on the other, is, above the ocular sternum, of considerable vertical extent, and is angulated supero-internally on each side of the rostrum for the reception of the longitudinally-plicated antennules; it is apparently made up of the ocular and antennulary sterna and descending laminae of the fore margin of the carapace. The stout triangular and decurved rostrum extends but little beyond the antennal spines, the rostral and supra-orbital spines are small, sharp, recurved, and superior; the anterior margin of the carapace terminates below in a sharp antennal spine. The carapace is pubescent, thick, of somewhat macrurous form, anteriorly, in front of the two spines which are placed on the lateral lobes between the two divisions of the cervical groove, semicircular in outline, with the upper surface convexly declivous; behind these two spines it is parallel-sided, with the middle part of the upper surface flat and the lateral parts rounded; it bears two spines in the position of those which form the outer boundary of the orbit in *Paromolopsis Cuvieri*, with which it agrees exactly in areolation and tolerably closely in the degree to which the hepatic regions are advanced; the lateral margins are still less marked, being

only indicated by a few epibranchial spinelets. The *linea anomurica* is not apparent without dissection. The chelipeds, which agree in all essentials with *P. Cuvieri*, and the first three pairs of legs, which are very long and slender and armed with spines along both edges of the meropodites, are hairy, the former equally so throughout, the latter chiefly on the meropodites. The last pair of legs is weak, unarmed, and almost devoid of setæ, and differs from those of all the other species of the group with which we are acquainted in the form of its subchelæ, in which the dactylus is minute and folds back upon the slightly enlarged distal end of the propodite; its meropodites when laid forwards reach the spines of the antero-lateral margin.

The eggs are very small, and in the only ovigerous female examined are present in such volume as to cause the complete extension of the abdomen.

Colours in life pale pink, with the fringes of the chelæ black.

	Male. millim.	Female. millim.
Length of carapace from apex to hinder margin .....	16.25	20.5
Breadth between spines at junction of arched fore- with parallel hinder-sided part .....	13.25	17
Length of chelipeds .....	36	42
Expanse of legs .....	115	120

Four specimens, two males and two females, of which only one pair is in good order, were obtained at Station 105, depth 740 fathoms.

## Order ISOPODA.

### Family Bathynomidæ.

#### 50. *Bathynomus giganteus*, A. M.-Edw.

*Bathynomus giganteus*, A. Milne-Edwards, Comptes Rendus, 1879, t. lxxxviii. pp. 21-23; A. Agassiz, Three Cruises of the 'Blake,' 1888, vol. ii. p. 49, fig. 252.

Three females of this remarkable form were taken at Station 105, in 740 fathoms. They measure 160, 195, and 200 millim. respectively in length, in a straight line from the front of the head to the extremity of the telson. As the genital apertures are not traceable, and as the largest oostegal plate measures only 8 millim. in length in the largest speci-



men and only 4 millim. in the smallest, it is presumable to infer that the specimens are not adults.

The living animal is of a pale lilac colour.

*Bathynomus* was first obtained by the 'Blake' in 955 brasses north of Tortugas Reef in the Gulf of Mexico.

## Order STOMATOPODA.

### SQUILLA, auctorum.

#### 51. *Squilla tenuispinis*, sp. n., Wood-Mason.

Carapace small, with the antero-lateral angles produced suddenly to a small sharp spine, which does not project beyond the middle of the anterior margin, with its three carinæ evanescent at both ends in the præcervical part and at the anterior end only in the postcervical part, and with the postero-lateral angles rounded. Rostrum semioval, about as long as broad, with a faint median longitudinal ridge on its distal half, but without raised rims, covering only the middle of the base of the antennularly somite, which is produced at each of its antero-lateral angles into a sharp spine a trifle longer than the antero-lateral spines of the carapace. Eyes asymmetrical in themselves, rather small, the greatest width of their conjoined lobes little exceeding the length of the rostrum.

Tergum of fifth thoracic somite curved forwards at its outer ends, which are terminated by a small spine; terga of the sixth and seventh triangularly produced and terminated by a small spine postero-laterally. First to fifth abdominal terga provided with eight carinæ, two submedian, two sublateral, two lateral, and two marginal, all the marginal, all the lateral except the first, and all the sublateral except the first and second ending posteriorly in a small spine; sixth tergum furnished with six coarser carinæ, two submedian, two lateral, and two marginal, all terminating in larger spines than those of the preceding somites, especially the marginal, which are prolonged into an acuminate spine nearly as long, but not nearly as stout, as the marginal and submedian spines of the telson. Telson transverse, furnished above with a strong, median, roof-shaped carina terminating posteriorly in a long and fine spine, which projects for some distance into the median notch of the hinder margin, and on the margin with six long and acuminate spines in three pairs, of which the submedian enclose an acute angle and have their inner edges for about half their length from the base minutely spinulose; the lateral are the longest and separated from the submedian by ten spinules (of which

the two extreme are larger than the rest), and the marginal are about the same length as the submedian and separated from the lateral by one spinule. The spine of the basal joint of the caudal appendages is divided into two long and acuminate lobes, of which the inner is about one and a third times as long as the outer and bears the usual minute cusp on its outer side.

The dactylopodite of the raptorial limbs is armed with four teeth, including the terminal claw on its inner edge, and is notched near the base of its outer edge.

Colour in life deep pink.

Total length from tip of rostrum to tips of submedian spines of telson 61 millim.

A single male was obtained at Station 96, in 90 to 100 fathoms.

A single young female specimen measuring only 37 millim. had previously been taken off Cheduba, Arrakan coast, at about the same depth.

#### Grade ENTOMOSTRACA.

#### Order CIRRIPEDIA.

#### SCALPELLUM.

#### 52. *Scalpellum*, sp.

From Station 56, 240 to 220 fathoms, on a dead *Gorgonia* with a black polished stem.

#### 53. *Scalpellum*, sp.

From Station 96, 98 to 102 fathoms, a small cluster on a fragment of dead *Gorgonia*.

XXVIII.—*Bathynectes*, *Stimpson*, a British Genus of Crustacea *Brachyura*. By the Rev. Canon A. M. NORMAN, M.A., D.C.L., F.R.S., &c.

IN 1871 Stimpson established a genus, *Bathynectes*, to receive certain crabs nearly related to the genus *Portunus*, which had been dredged in 100–200 fathoms by Pourtalès in the Gulf-stream in the Straits of Florida. In 1877 Bovallius procured